



THE RARA RAG

Newsletter of The Rochester Amateur Radio Association, Inc.

Founded in 1931

APRIL 2022
VOLUME 74, ISSUE 8

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OLD TIMER'S NIGHT - 1BCG TRANSATLANTIC MESSAGE

SCOTT THEIS, W2LW, RA RA VICE PRESIDENT

April is our annual Old Timer's Night with a presentation brought to us by Bob Hobday, N2EVG and Ed Gable, K2MP, from the Antique Wireless Association (AWA). The meeting will be a combination of in-person and online broadcast via GoToWebinar.

Bob and Ed will be presenting on the 100th anniversary of the first transatlantic radio transmissions. On a cold winter night on December 11, 1921, members of the Radio Club of America were able to send the first amateur radio message from a small shack in Greenwich, CT to be received by American Paul Godley in Ardrossan, Scotland. This transatlantic test proved the value of shorter wavelengths – long considered worthless to long distance communications – and their success ushered in the age of global shortwave radio communications. The 1921 message was sent one-way. Acknowledgment of Paul Godley's reception of 1BCG's message was sent back to the US via the Marconi high power radio transmitter in Wales.



Both Bob and Ed have contributed mightily to antique radio and amateur radio, performing many roles. Bob is presently President and Chairman of the Board of the AWA. He has been a member of AWA since 1984, serving as a Museum Historian and a volunteer on the Museum Staff. Bob is also a member of the Radio Club of America and ARRL. Ed currently serves as RA RA's Historian and Curator Emeritus of the AWA Museum and Curator of the Parma Hilton Historical Society, and sits on the Board of Directors of the Guelph Museum of Radio (Guelph, Ontario, Canada). Both Bob and Ed are life members and past Presidents of Rochester Amateur Radio Association. Unfortunately, there is not enough real estate on this cover to enumerate all of what they have contributed over the decades.

Speaking of Past Presidents, it has been our custom to take a group photo of as many RA RA presidents past and present as we can muster at the meeting. If you are a past president please join us in person!

Please join us on Wednesday, April 6th, 2022, 7:00PM either at the Boy Scouts Headquarters at 2320 Brighton Henrietta Townline Road, Rochester, New York 14623 or online by registering at:

<https://attendee.gotowebinar.com/register/2736607897512266252>

K2JD

N2EH

W2EOC

RA RA



YouTube

FREE VE TESTING

Rochester Hamfest 2022

ROCHESTER AMATEUR RADIO ASSOCIATION

SATURDAY JUNE 4TH 2022

HILTON EXEMPT CLUB, 137 SOUTH AVE. HILTON, NY 14468

FOR MORE INFORMATION

VISIT [HTTPS://ROCHESTERHAM.ORG/HAMFEST.HTM](https://rochesterham.org/hamfest.htm)

NON-MEMBER ADMISSION: \$7 PER PERSON

TALK-IN: W2ARM REPEATER

146.610/444.45 PL 110.9

FREE QSL CHECKING

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BOARDZ BUZZ

MIKE MOORE, KC2NM, RARA TREASURER

RARA GROWS IN ITS MISSION DESPITE THE COVID 19 PANDEMIC

As we approach the 2-year anniversary of the challenges imposed by the Covid 19 Pandemic, this board buzz article describes things that RARA has done to deliver its mission, survive as a club, and continue to grow. Examples of the actions that the club took to continue its missions of promoting community value, radio and communications skills, and encouraging camaraderie are detailed in the Sept 2020 RAG Board Buzz by Brian O'Connor. We were able to conduct general meetings, board meetings, RARA Academy, license classes, and auction (limited success) that were held online. License testing continued by renting a large facility that allowed us to follow social distancing guidelines. RARA was successful in keeping club members engaged and the board operating by moving to online meetings and communicating via the RARA Rag, Club website, and Social Media.

As we moved from in-person activities to online meetings there were a few surprises. We actually picked up some new members from outside of our area. Some were former members currently living outside of the area that renewed their membership or heard about what we were making available online. Another opportunity that arose resulting from the online forum was that we could have presenters for our technical sessions from outside our local area. We had one presentation about a worldwide ham seminar from Eric Guth, 4Z1UG who presented from Israel. Another remote presenter was Dave Casler, KEØOG who has authored over 300 videos in his "Ask Dave" series. I found that in some cases, the online presenters were easier to follow when listening with a headset and viewing on a screen right in front of me.

To continue to develop these areas of growth, the RARA board has decided to pivot from the online meetings to a hybrid meeting with the return to in-person meetings. To facilitate this we have added equipment to our PA system in the form of a computer interface, microphones, and speakers that allow us to show our presentations online, and field questions from remote users. Our plan is to serve the members that we have added and local members that need to travel with up-to-date online conferencing capabilities. We plan to use this new ability to provide our local meeting attendees with additional remote content. Our new setup is shown in the diagram following.

The new system was purchased by the club and has two loudspeakers driven by an audio amplifier with input from a multichannel mixer. Both the amplifier and mixer are mounted in the roll-around case shown in the picture. There are two wireless microphones and one of these is used by audience members attending in-person for asking questions. Audio from this and the presenter's microphone are fed out to the remote attendees so that they can hear words from the presenter in addition to questions and comments from the in-person audience. There is a camera that provides video of the presenter and this is added to the presentation video for presentation to the remote attendees. Audio from



RARA Video Conferencing Rig April 2022

the remote attendees is routed through the mixer, amplifier, and speakers from the conference when the remote attendee is unmuted. The audio to and from the conference server is sent through a matching device to the mixer.

During the March hybrid meeting, this system worked well. In-person attendees could hear and see the local presenter and screen presentation. Remote attendees could hear and see the local presenter and screen presentation. When questions were asked by local attendees, they were given the wireless microphone and remote attendees could hear the question and see the presenter's response. When questions were asked by remote attendees, the local attendees could hear the question over the loudspeakers. There were roughly 20 remote attendees and this new setup worked well with many questions and comments from the local and remote attendees. The new equipment seems to be well suited for our hybrid meeting needs.

CALENDAR OF EVENTS

SATURDAY APRIL 2, 2022 - Elmers Corner

10:00AM ON LINE

[https://us02web.zoom.us/j/83484674667?](https://us02web.zoom.us/j/83484674667?pwd=MG5DZXd6SFovN3lXa0NNTzM5UnBLUT09)

[pwd=MG5DZXd6SFovN3lXa0NNTzM5UnBLUT09](https://us02web.zoom.us/j/83484674667?pwd=MG5DZXd6SFovN3lXa0NNTzM5UnBLUT09)

WEDNESDAY APRIL 6, 2022 - General Meeting In Person and On-Line

7:00 PM - AT THIS LINK

<https://attendee.gotowebinar.com/register/2736607897512266252>

THURSDAY APRIL 7, 2022 - RARA Board of Directors Meeting

6:30PM ON LINE

Email request for link to secretary@rochesterham.org

SATURDAY APRIL 16, 2022 - VE TESTING

10:00AM Rochester Institute of Technology, Bldg 16
Schmitt Interfaith Center, Skalny Room

Saturday June 4, 2022 - RARA Hamfest

Membership – Time to Renew!

- RAG Circulation ~5,000
- RARA Membership ~400
- RARA is the 6th largest ARRL affiliated club
- **Let's make it the largest!!**
- Renew or join [here](#)
- If you have a problem renewing, please email us at:
membership@rochesterham.org



Don't Delay, Renew Today!



EDUCATION

Karl Heinz Kremer, K5KHK, Education Coordinator

RARA LICENSE COURSES

Karl Heinz Kremer, K5KHK, License Class Coordinator

By the time you are reading this, our Winter classes will have come to their end, and hopefully we will have a few more Technician, General and Amateur Extra class hams in our club. Two of my Technician students passed their test early and will have tried for their General upgrade.

We do not currently have any plans for license classes in the spring or summer. If you are interested in taking one of our next classes in the fall, please send an email to education@rochesterham.org, and we will put you on the list.

New Technician Question Pool

The current Technician license test is being retired at the end of June and replaced with a new test with new and modified questions. If you've been working on getting your Technician license, now is the time to get serious about it and finish studying for the test and take the test before that deadline. Otherwise, you will have to start over with the new question pool.

Deep Discounts on Technician License Manuals

I have two license manuals for the current version of the Technician license test available. We are not teaching any more classes before they expire, we are selling them for \$10. You would have to pick up the book(s) in Chili. If you are interested, please send an email to education@rochesterham.org

License Manuals

Even though we are not teaching any classes over the summer, we still have the license manuals available if you want to study on your own. The current

editions of the General and Amateur Extra license manuals are available to our members at a discount for \$25. If you are interested, please send an email to education@rochesterham.org

RARA ELMERS' CORNER

Suzanne Bishopp, W2SUZ

Rich Bishopp, KD2UBJ

Elmers Corner Coordinators

Wow, what a great Elmers' Corner we had in March! We covered so many topics, just to name a few – 160M, how and when, power “surges” on 17M w/ FT8 - EFHW, and drifting oscillators. You can check it out with the link below.

<https://youtu.be/tJuXpJlc-bk>

Grab a cup of coffee, and check in with us at our next Elmers' Corner on April 2nd at 10 am. Bring a question to ask about ham radio or some nifty tips and tricks. This is an open forum for general Q&A.

You can submit questions early if you would like, this way we can give our Elmers a chance to prepare. Submit those early questions to:

elmerscorner@rochesterham.org.

Elmers' Corner is for ALL hams! Beginners and experienced hams.

Even If you can't make it on the first Saturday of the month for the zoom meeting, let us know if you have a specific topic you would like to learn more about. We will do our best to find the right Elmer to get the answers to your questions. We record each meeting, so you can watch it whenever you have the time. Thanks, and see you at the April Elmers' Corner!

April ELMERS' CORNER

Saturday, April 2nd from 10AM – 12PM

Join Zoom Meeting

[https://us02web.zoom.us/j/83484674667?](https://us02web.zoom.us/j/83484674667?pwd=MG5DZXh6SFovN3lXa0NNTzZM5UnBLUT09)

[pwd=MG5DZXh6SFovN3lXa0NNTzZM5UnBLUT09](https://us02web.zoom.us/j/83484674667?pwd=MG5DZXh6SFovN3lXa0NNTzZM5UnBLUT09)

Meeting ID: 834 8467 4667

Passcode: 786545

One tap mobile

+16465588656,,83484674667#,,,,*786545# US (New York)

+13126266799,,83484674667#,,,,*786545# US (Chicago)

Dial by your location

+1 646 558 8656 US (New York)

+1 312 626 6799 US (Chicago)

+1 301 715 8592 US (Washington DC)

+1 253 215 8782 US (Tacoma)

+1 346 248 7799 US (Houston)

+1 669 900 9128 US (San Jose)

Find your local number: <https://us02web.zoom.us/j/kiOoVkCMY>

NO MAY ELMERS' CORNER on Zoom, we will be at the ACADAMY

RARA ACADEMY

Kevin Denton KD2WXS has volunteered to tackle one RARA Academy session (with the option to stay on for more). Please join me in welcoming Kevin to our RARA Education department.

You can reach Kevin at academy@rochesterham.org. He is looking for input in what our next Academy session should cover. If you are in a position to actually present such a session, please get in touch with Kevin.

MORSE CODE TRAINING

DAVE WILSON, WA2HOY, RXCWG COORDINATOR

The RXCW Group assists Hams wanting to learn Morse Code or to develop their CW skills.

MORSE CODE COACHING

Request a description of the RARA beginner coaching sessions from pfournia@gmail.com. You learn on your favorite software and on your schedule and pace. You schedule zoom sessions to review your learning approach including QSO scripts and use of your equipment.

MORSE PRACTICE FOR ALL LEVELS ON ZOOM

Tim Brown, WB2PAY, hosts code practice for all levels on Thursday evenings at 7:30pm. Register at: tjbrown@rochester.rr.com

MORSE PRACTICE ON AIR

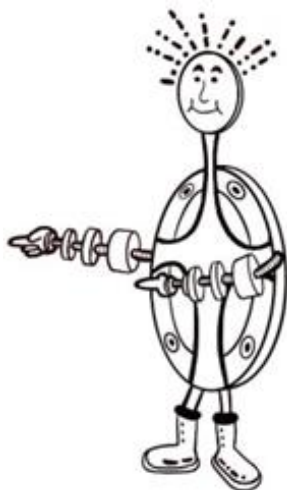
Tim Brown, WB2PAY, hosts on air practice on Tuesdays at 2PM on 6M at 50.250MHz.

To set up a cw sked, contact Peter at pfournia@gmail.com or Tim at tjbrown@rochester.rr.com

New News: The RCXW Group will host a CW Exhibit and Demo table at the RARA May 7th HF Hands on Academy at Black Creek Park. More details about the Academy under Education on the RARA web page.

W1AW Code Practice MP3 Files: <http://www.arrl.org/code-practice-files>

W1AW - <http://www.arrl.org/w1aw-operating-schedule>



Time	Mon	Tue	Wed	Thu	Fri
9 AM		Fast	Slow	Fast	Slow
4 PM	Fast	Slow	Fast	Slow	Fast
7 PM	Slow	Fast	Slow	Fast	Slow
10 PM	Fast	Slow	Fast	Slow	Fast

SLOW - 5, 7 1/2, 10, 13 and 15 wpm

FAST - 35, 30, 25, 20, 15, 13 and 10 wpm

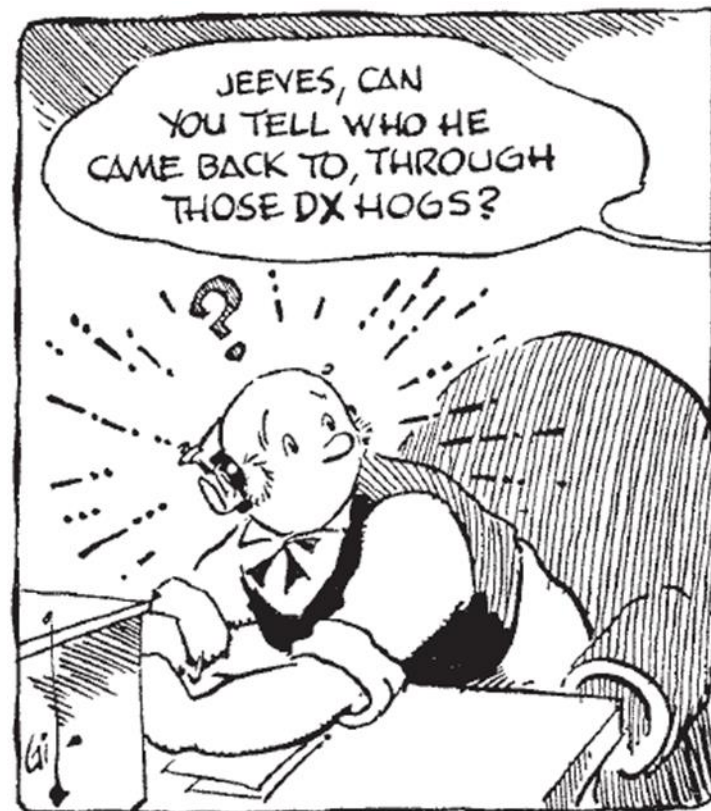
FREQ(MHz) - 1.8025, 3.5815, 7.0475, 14.0475, 18.0975, 21.0675, 28.0675, 50.350, 147.555

RADIO ELMERS

Name	Call	Area	Email
Tim Brown	WB2PAY	Ogden	tjbrown@rochester.rr.com
Dave Carlson	N2OA	Batavia	kdcarlso@gmail.com
Lawrence Hill	N2AJX	Henrietta	lawrence.hill@rit.edu
Rich Hoffarth	K2AXP		rhoffarth2000@yahoo.com
Bill Kasperkoski	WB2SXY	Pittsford	wb2sxy@gmail.com
Don Kiser	AC2EV	N Greece	dkiser100@gmail.com
Karl Heinz Kremer	K5KHK	Chili	k5khk@khk.net
Tim Magee	WB2KAO	Greece	585-704-5747
Mike Moore	KC2NM		mikemoore@ieee.org
Peter Schuch	WB2UAQ	Perinton	pschuch@rochester.rr.com
Forest Shick	WA2MZG	Webster	fshick3@gmail.com
Dave Timmons	W2DST	N Greece	dstimmons@gmail.com
Steve Verzulli	KA1CNF		verzulli@yahoo.com
Dan Waterstraat	W2DEW	Henrietta	higreen@rochester.rr.com

CW ELMERS

Name	Call	Area	Email
Ned Asam	W2NED	Pittsford	w2ned@frontiernet.net
Tim Brown	WB2PAY	Ogden	tjbrown@rochester.rr.com
Pete Fournia	W2SKY	Penfield	pfournia@gmail.com
Bill Hopkins	AA2YV	Brighton	whopkin4@naz.edu
Bob Karz	K2OID	Webster	rkarz@rochester.rr.com
Joe Rowe	AG2Y	Webster	ag2y@rochester.rr.com
Harry Williams	KF2TV	Webster	harryw7872@gmail.com



COURTESY APRIL 1947 QST

APRIL RAFFLE PRIZES

- Tiny Spectrum Analyzer
- Small Drone
- CQ Digital Subscription

Coming in May

- DX Engineering \$25 Gift Certificate

PUBLIC SERVICE REPORT

MIKE MOORE, KC2NM, PUBLIC SERVICE COORDINATOR

COMMAND AND CONTROL OF AMATEUR RADIO COMMUNICATIONS FOR A PUBLIC SERVICE EVENT

Amateur Radio Operators are just a part of the team needed to put on a public service event. We also work with our served agency, law enforcement, emergency services, government agencies, event volunteers, and event participants. This public service update describes the Command Center that we use to provide communications for an event and these team members. In addition to amateur radio messages, our command center also passes information obtained from websites, received as text messages, telephone calls, and in-person communications. Communications for an event are managed in a command center. Depending on the needs of an event the command center may be set up in the ARES Trailer, a conference room, or even in a picnic shelter. Some events cover a geographic area that is larger than the coverage area of a single repeater. To provide this wide area coverage we can use repeater linking of the [Allstar Network](#). In fact, this network is sometimes used as the connection from the command center directly to repeaters using a link established for the length of the event. Refer to the drawing "Comm Trailer Outdoors" which shows the remotely operated radios in the ARES Trailer that are used to communicate from the command center to the repeaters used for the event. These radios and associated antennas are used to communicate to the field operators through the event repeaters. The 5 GHz IP Link controls the radios mounted in the ARES Trailer from the Command Post.

The ARES trailer is located in a parking lot and the Command Center may be located in an adjacent building with access to the radios using a 5GHz IP link. Refer to the drawing "Command Center Indoors" which shows the computers and telephones used to run the event.

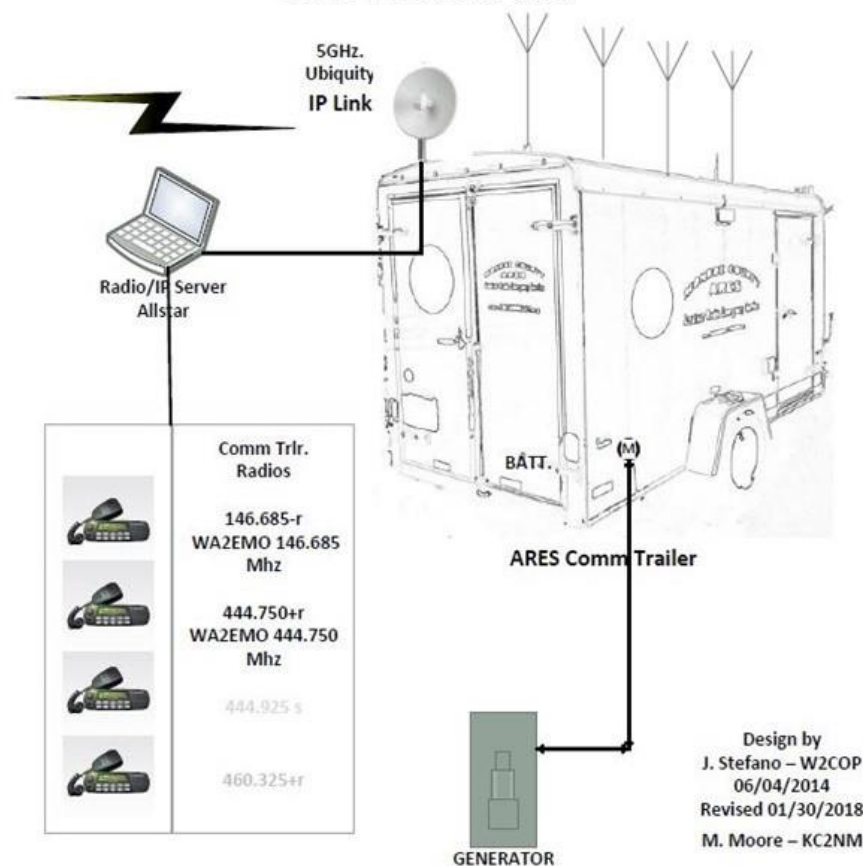
From the Command Center, the 5 GHz IP link communicates to the ARES Trailer through a building window.

The Command Center is set up on a conference table with about 4-5 operators. These can be hams that operate the radio links working with non-ham volunteers manning the telephone and computer station. The following elements are found in the Command Center.

Internet Connection - Internet is provided using a cellular phone or cellular modem with router and associated switches.

Voip Telephones - These are IP phones connected via the Internet Connection to a cloud-based asterisk telephone system. We have two telephone numbers that are dedicated to the event. There is a number that is given to event participants to be used if they need immediate help. There is a second number that may be used for administrative purposes. Phone calls are placed and answered

COMM TRAILER OUTDOORS

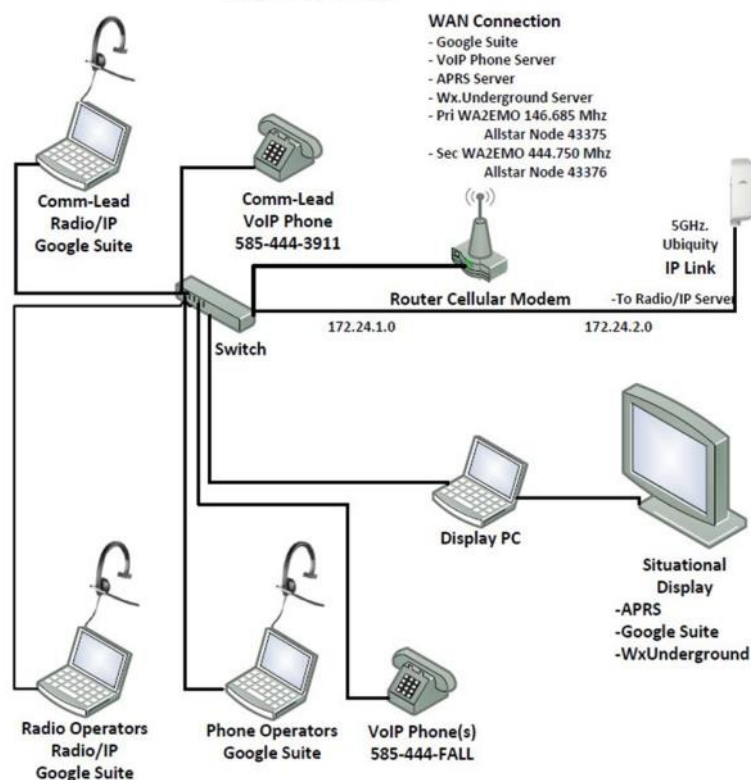


using the VOIP telephone or a softphone program running on the PCs. Calls and requests for help are logged on the computers to a shared Google Sheet.

Situational Display - This is a computer with a large TV display. It is used to display the event area weather radar or APRS map. The APRS map has been customized to show the event map with landmarks. Hams with APRS radios or APRS smartphone programs appear with their positions on the map.

Radio Operators - The radio operators use headsets with microphones with a footswitch for PTT. These are connected to computers running Radio Over IP software (ROIP) and can talk to the event repeaters directly or through the 5 GHz IP to the radios in the ARES Van. The radio operators serve as Primary or Secondary net control and log requests for help and resolutions on the computers to a shared Google Sheet.

COMMAND CENTER INDOORS



Hams operating the event in the field will be assigned a job with instructions modified by communications from the command post. These jobs are things like tracking or locating participants, taking items for repair (such as a bike), delivering supplies, or transporting participants. Communications with the served agency will be conducted via telephone or in-person. Logs created during an event are saved in Google Workspace and are analyzed for lessons learned and shared with our served agency.

We have learned that the date selected for the Fairport Liftbridge Regatta conflicts with another regatta. It is possible that the October 1 date may change to an earlier weekend. We will continue to work with our served agencies about what the coming year will bring. For up-to-date information about all of our Public Service events take a look at our RARA website https://www.rochesterham.org/public_service.htm.

Operating Events

Event	Location	Day	Date
Field Day	Various	Saturday, Sunday	June 25, 26, 2022
ILLW	Charlotte-Genesee Lighthouse	Saturday, Sunday	Aug. 20, 21, 2022
JOTA	TBD	Saturday, Sunday	October 15-17, 2021

Please mark your calendars for our upcoming RARA Public Service Events

Event	Location	Day	Date
Tour de Cure	Xerox, Webster	Saturday	June 11, 2022
MS ROC the Ride	Lakeside State Park	Saturday	August 13, 2022
Fairport Liftbridge Regatta	Canal, Fairport	Saturday	September 24, 2022
Pumpkin Patrol	Bridges of NYS Thruway	Sunday, Monday	Oct. 30, 31, 2022
Holiday Science and Technology Days	Rochester Museum and Science Center	TBD	TBD

RARA ACADEMY / ELMERS CORNER HANDS-ON EVENT FOR NEW OR NEWLY UPGRADED HAMS

MAY 7TH 2022 AT BLACK CREEK PARK

You may remember that we had our first in-person event last May in Black Creek Park in Chili to give our newest hams and those with new HF privileges an opportunity to see ham radio in action, play with equipment and for some of them to make their first ever ham radio contact, or their first HF contact. This was a big success, and with our license classes still being held online, we would like to offer another opportunity for new and newly upgraded hams to get over some of the initial speed bumps that may keep them from getting on the air, and to see different aspects of ham radio being demonstrated.



We will again meet at the Pathfinder Shelter in Black Creek Park in Chili. The event will be held on May 7th, from 11am until 4pm.

These are some of the activities we have planned:

- Antenna building (HF and VHF)
- CW/Morse Code
- Digital modes (FT8, Winlink and more)

- Direction finding/Fox Hunting
- APRS (Automatic Packet Reporting System)
- Soldering Demonstration
- Portable and QRP operations

If you have been recently licensed, or earned an upgrade to HF privileges, or even had your license for years, but never used it, we would like to invite you to join us for this event. Please register by sending an email to education@rochesterham.org and let us know what you are interested in to help us with the planning.

This is a combined Elmers Corner and RARA Academy event: If you have questions about any of the demonstrations, you can ask questions right there, if you have any other ham radio related questions or problems, there is a good chance that we will have somebody there who can help you.

More information will be made available as we get closer to the event.

Silent Key

Paul Di Lorenzo
W2IMT
February 24, 2022

Silent Key

Robert Nezelek
W2CNS
March 8, 2022

Silent Key

James Wenskus
K2BEH
February 14, 2022



WINLINK FOR ROCHESTER

PAUL CONAWAY KD2DO

If you have been following this Winlink series in recent months you will know that there are many groups throughout the country that run what for lack of a better term are nets using Winlink. I hesitate to call them nets because, you never really communicate to anyone. You make your message and send it by radio to a Radio Message Server (RMS) where it is put on the internet. Then of course it can go around the world and pop up in Rangoon or wherever your addressed recipient gets his radio Email.

The exception to this is a process called peer-to-peer, or as I like to call it Person-to-Person. In either case Winlink calls it P2P. In this mode of operation you address your message to a person by his call sign. If he is on and listening on that frequency at the time your two machines will introduce themselves and set up a one to one connection. You can send your message directly to him without involving the internet at all. Some of the Winlink groups have a P-2-P session. The Wednesday group in Virginia is one. The Florida group is another. If you have HF capability you can try those groups to see how it works. It also works on VHF but it requires a bit more preparation. Because nobody locally is advertised as listening on a frequency and time, you have to set up your own schedule. You can use the 145.03 frequency without harm because only the addressed station will connect. However when our activity on 145.03 increases it might be wise to choose another frequency to allow the RMS a clear channel.

Many of the Winlink groups just want you to check in. That is good practice for operating the basics of sending and receiving messages. However some groups have gone to an extra level and offer you exercises of some sort to encourage you to try other features that Winlink offers. A common thing is to use some of the myriad forms such as an ICS-213 that are built into Winlink Express. These forms are updated on a regular basis so everybody using a form knows that the recipient has the identical one. Check with the group leader or web page for the group you wish to contact and see what their current exercise is.

Winlink Workday

The group I have started locally is primarily for the VHF users of the 145.03 RMS in Rochester. In recent weeks we have been playing with maps. I have asked users to find their location using a variety of coordinates. We have used Latitude and Longitude in both decimal degrees and in degrees, minutes and seconds. We have also used the military MGRS system and something new called What3Words. One exercise was to use Google earth to find the distance from 111 Westfall Road, where the RMS is located, to their QTH. The current exercise is to compute the coverage area, in square miles, of the 145.03 RMS based on the Lat-Lon coordinates of our users and reports of where the beacon was heard.

Here is a hint of what we may be doing in the future. Winlink Express has a feature called Radio only message. As you might guess from the name, these messages are not put on the internet, but rather stored locally until the recipient calls in. Remember bulletin boards? It works like that. This would come in handy when the internet is out and we still need to get Red Cross forms to and from shelters and Point Of Distribution centers (PODs) in the local area.

Of course we will start practicing with some of the forms.

If anyone has an interest in hardware, I know that we could use a digipeater for this RMS to fill in some places in Monroe and surrounding counties where direct coverage is not great. I would love to hear from people in Wayne and Ontario counties reporting if they can hear the beacon signal which is transmitted every 10 minutes

PROFESSOR'S Pic(k)s

JEFF SONSTEIN, WA2RRB

[Aid for Ukraine](#)

[Counting Pi](#)
[SWL is Back](#)

[Interesting Listening](#)
[Save This for Next Christmas](#)

[Lost NASA Satellite](#)
[SWLing](#)

[Lightning](#)

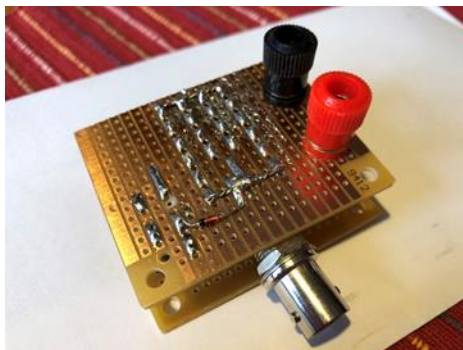
From Seth Irwin, KD2QZG

HOW TO GET INTO HOMEBREWING?

KARL HEINZ KREMER – K5KHK

As you can read on a different page in this issue, at the last Elmers Corner, we had a discussion about homebrewing (this is about electronic, not about beverage, even though you can homebrew a beverage antenna, but that's for another time).

Homebrewing has a long history in ham radio. The first ham radio transmitters and receivers had to be homebrewed, there was no DXEngineering or HRO to just pick up the latest and greatest radio on the market. The schematics for those first transmitters were oftentimes “published” on QSL cards. Somewhere between back then and now, there was Heathkit that supplied hams with transceivers that one could build in a few evenings.



Things have changed since then. Most hams are no longer interested in building their own radios. This means that today we probably would not have a market to sustain a company like Heathkit.

Having said that, homebrewing is not dead, and I think we live in a time where we have resources at our fingertips that hams from earlier times did not: YouTube and the Internet in general can provide a lot of inspiration, information, and guidance with our projects. There are still advantages to homebrewing some (or all) of your gear:

- If you built it, there is a good chance that you have a better chance of repairing it than an off-the-shelf transceiver.
- If you spent some time with the circuit diagram, there is a good chance that you actually understand what the different parts or component groups do.
- There is quite a bit of pride in announcing on the air that your radio is “HB” or homebrewed.
- And independent of any benefits for you, you are also helping to keep a long tradition of homebrewing in ham radio alive.

There are different levels of homebrewing: You can take the Heathkit route, or you can follow the path of the first hams – and anything in between.



Buy a Complete Kit



might help to put the kit together.



The easiest way to get into building is to buy a kit that comes with all the parts and instructions that tell you how to put the kit together. These instructions come in different quality levels: Some that rival the manuals that Heathkit used to produce, some barely qualify as assembly instructions, and if you buy kits from China via eBay or AliExpress, you may not get any instructions at all, and need to search online for any information that

If you want the top-of-the-line manuals, one option is to buy kits from QRP Labs. The problem here is that this would limit you to CW or digital modes at this time. The QCX, a 5W CW single band transceiver, is the best value in ham radio: For a little more than \$50, you get a kit that brings its own test equipment with it. And the QDX, again a 5W radio, but this time for FT8 and similar modes, would fit the bill if you want to stay away from CW.

There are other kit companies out there. The best way to find something suitable is to talk to your fellow RARA members who have experience with these projects.

Design Your Own Radio

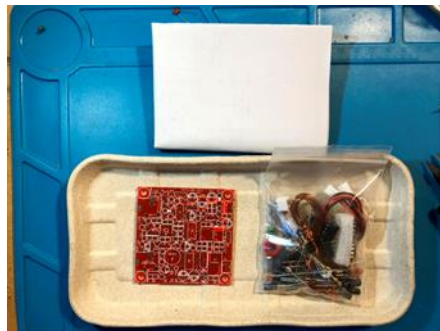
The other end of the spectrum is to build from scratch, and your own design. This is not a beginner's project, and somebody who wants to attempt this has very likely built a number of kits and tried to redesign some of the modules that make up these kits. The next step would then be to start from scratch with a blank piece of paper. How do you get your start here? It comes down to thinking in modules: Your radio is not just a hundred (or more) different parts, but a number of different sub-systems that do a certain task. If you can isolate that task, and build a circuit that may have 10 parts, you can test this one module and make sure it works, before you integrate it with other modules.

How do you go about designing and building such modules? You learn as much as you can about what makes an oscillator, a mixer, an amplifier, ... And you can do that by reading a number of different books. The bad news is that all the good books (at least the ones I am aware of) are out of print, and hard to find and expensive if you can actually find one. Here are some of my recommendations:

Experimental Methods in RF Design by Hayward, Campbell and Larkin – This is (or was) an ARRL publication, and a few years ago they even did a "Classic Reprint Edition", but it's no longer available from the publisher. Look for used copies at ham fests. This book walks you through how the different parts we use for our radio work, how you would design with them, and then moves on to the sub-systems I've mentioned earlier, while presenting designs that work. You may run into problems finding some of the parts, but there is a good chance that you can substitute other parts for most of the designs in the book. Oftentimes this book is referred to as EMRD. If you've spent some time with back issues of QST, you may recognize the author's names. They've published a lot about homebrewing.



The Electronics of Radio by David Rutledge – This is actually a textbook for a college course about building (and understanding the electronics involved) a CW transceiver. The radio in question is the NC40A – a design for the NorCal QRP club by Wayne Burdick N6KR, one of the cofounders of Elecraft.



You can find information about the radio in the QRPp issues link further down.

Building a Transceiver by Eamon Skelton, EI9GQ and Elaine Richards, G4LFM – This is the design of a complete multi-band QRO transceiver, broken down into modules. The book is based on articles that were published in RadCom, the magazine of the RSGB in the UK.

This approach does take quite a bit of time, is very challenging and may not result in a working radio in the first attempt. However, you will get the most satisfaction out of using "your" radio.

Something In Between



To work your way up from building complete kits to the from scratch approach, there are number of ways you can gain more experience and learn more about the electronics of radio. You can start out to build a design by somebody without having access to a kit: You would procure your own parts, and then assemble them in "dead-bug" or "Manhattan" style (what this means will become clear once you read more about

homebrewing), or by designing and etching your own printed circuit board, or even have one manufactured by one of the cheap manufacturers in China.

Once you have accomplished that, you can look at the modular approach, and pick and choose different modules from proven designs. You can find those in in EMRD, back issues of QST, or several other resources. Here are a few of those resources:

The NorCal QRP club (unfortunately no longer in existence) has a huge archive of their newsletter QRPp which you can find here: <http://www.ncqrp.org> – the NC40 and NC40A that was mentioned earlier is documented here among many other designs.

As part of an ARRL membership, you get access not only to QST and the QST archive, but also to the QEX magazine in electronic form, which has more technical articles than what you would find in QST.

The QRP club in the UK has a newsletter called SPRAT that is full of projects. Once you join the club, you can purchase a DVD or a thumb drive with all SPRAT issues going back to the beginnings of the club.

Charlie Morris ZL2CTM has a YouTube channel full of homebrew projects. In his videos, he walks you through his design process: <https://www.youtube.com/c/CharlieMorrisZL2CTM/featured>

Pete Juliano N6QW (a cohost of the Soldersmoke podcast), who is probably the world record holder in building the most SSB transceivers in a year, has several of his designs published on various web sites. You can find some of his designs here: <https://www.n6qw.com>

And of course, there are mailing lists that discuss homebrewing. Unfortunately, with the demise of Yahoo's mailing lists a few years ago, a lot of that information has been lost forever. Here are a few links that can get you started:

<https://groups.io/g/grp-tech> - This list is unfortunately no longer active, but has a huge amount of historic data.

<https://groups.io/g/grptech> - This is the logical continuation of the old grp-tech list.

<https://groups.io/g/QRPLabs> - Specific to the QRP Labs kits.

Once you start to dive into this, you will find other resources.

You may have noticed that there is a lot of mentions of QRP in this article: Homebrewing is much easier and safer when it is limited to QRP power levels. Once you master that, just hook up an amplifier and you are operating QRO.

If you are interested in building something, but don't know where to start, talk to me or any of the other HB elmers in the club. We are all eager to get more people interested in a fun niche of our hobby. And if you do build something, let us know about it.

HAM SPAM

SCOTT THEIS, W2LW, VICE PRESIDENT/WEBMASTER

We have recently received reports of scammers masquerading as club members sending phishing and scam emails with files attached. In the last few weeks, I have received more than one hundred fake emails from "club members" asking or demanding a variety of things. If you receive these emails: DO NOT OPEN THESE FILES! THEY ARE LIKELY VIRUSES!

I am not sure if we have been targeted or if it is part of a larger attack. In my day job, my company also has seen a large uptick in such emails. As I am sure everyone knows, the internet is the wild west of scams, hacks, schemes, etc. and we all must be wary.

There is little that the club can do to stop these emails purporting to come from members. Our strong advice to you is to be safe and help avoid spreading the viruses that propagate these emails.

To help keep yourself safe:

1. Verify the sender. Most email clients will let you view the actual email address of the sender. So, if you get emails from Jim and the sender is normally "Jim Anderson <Jim12345@gmail.com>" but now is "Jim Anderson <al34@something.co.jp>", that is a pretty good clue that it is a scam.
2. Mark spam as spam in your email client. This helps your spam filter and may also help others.
3. NEVER open an attachment you were not expecting.
4. NEVER install any software you're not expecting. For software you are expecting, make sure it is digitally signed before installing it.
5. Make sure you have virus protection software, and it is up to date. Windows 10 has Windows Defender. Older versions used Windows Essentials. Keep your operating system up to date, no matter the platform.

Here are some additional resources to help you avoid email scams:

[10 Common Email & Internet Scams – How to Avoid Them](#)
[Common Email Scams](#)

If you have questions, feel free to contact me at:

webmaster@rocheserham.org.

RAGS OF THE PAST

ED GABLE, K2MP, RARA HISTORIAN

20 Years Ago, April 2002

This month saw the return of a once active Rochester ham; a past President of the RRRA, a life member and past President of RARA and for several years the editor of the RARA Rag. He then left Harris/RF and Rochester for new opportunities with Antenna Specialist, Allen Telcom, and is now Chief Engineer with TX/RX Systems in Angola, NY. He is Ron Jakubowski, K2RJ. (Ron currently holds the position of Treasurer with the oldest Radio Club on the planet, the prestigious Radio Club of America. – Ed) Ron's talk was on a subject we can never have too much expertise in, the Science and Art of Troubleshooting. Throughout the talk Ron emphasized the need to logically understand and analyze a problem before attempting a fix it. Richard Goslee, K2VCZ (KG2I), wrote to inform members on recent activity within the "RARA Memorial Scholarship Program Committee." As a reminder, the memorial scholarship was set up with generous donations remembering Lee Zwack W2WPF, Bill Buchan W2OMV and Bill Resch K4VOS, and is available to any licensed amateur pursuing a degree in any accredited program beyond High School. Last year's first winner was Kelley Gauvin, KB2CHC, daughter of local RDXA member Vic Gauvin, K1PY. A "behind the scenes guy," working to ever improve the Rochester Hamfest programming, was Lloyd Caves, WB2EFU (N2PU) who wrote in this issue Part III of four parts detailing presentations for the future Hamfest in May. Lloyd told of scheduling an ARRL Forum, a joint Army, Air Force and Navy-Marine Corps MARS gathering, A contest Rover program by the Rochester VHF Group, the W2"RUF and Ready" Code proficiency Contest, and brand new to the area a DXCC Card Checking booth by Ed Gable K2MP. "Don't Hoard Experience" was the title of an entry by Bill Kasperkoski WB2SXY. Bill wrote on how a ham's learned experience over the years is a valuable asset that should be shared with others, and a way to do that is to join the corps of Elmer's being coordinated by John May, KC2DVX. Norm Turner WB2LBQ, writing for the RARA Licensing Classes that started on February 10th, reported that 27 new students were signed up in different categories. Instructors for this session included Allen Skiles N2VY, Technician Theory, Lynn Rosenberg N2IZX, 5 WPM Code, Bill Kasperkoski WB2SXY General Theory and Carl Predy KU2N dishing out Extra Theory. The better than average student turn out was in part credited to George Platteter AA2FO (sk), who penned a nice Licensing Class article that appear in the Democrat and Chronicle newspaper. While such classes historically have helped membership, two articles appeared between these covers by Brad Allen KB2CHY (sk) and Bill Hopkins AA2YV, both encouraging members to do what they can to encourage new members. With regret it was reported that Phil Teck N7OY, ex-N2WLQ, was reported a Silent Key. From the Want Ads we found Paul Mackanos K2DB, and Toni Connors, Sales Agents for RE/MAX Realty Group, offering help with you home sales. There were only two commercial advertisers, so take your pick of either Glenwood Sales or Sherwood Snyder, W2KFU (sk), Attorney at Law.



the RARA RAG

Published by
ROCHESTER AMATEUR RADIO ASSOCIATION, INC.

VOL.54

APRIL 2002

NO. 7

The Science And Art Of Troubleshooting

Ron Jakubowski, K2RJ
Marykay Vesco, KC2DPG

We are going to have another very special program this month. Do you remember Mr. Ron Jakubowski, K2RJ?? He is a Life Member and Past President of RARA and also, a Past President of RRRA, in addition to being the editor of the RARA RAG in the early 80's. Well, he is going to join us at 8:00PM for our April 5th, 2002 general meeting at the Henrietta Fire Hall. He will be presenting a "killer" program on "The Science and Art of Troubleshooting" or a simpler title "How to Fix Something that's Actually Broken!"

Ron has had many years of experience in troubleshooting equipment and systems through his work experience at Harris/RF, Antenna Specialists, Allen Telecom and TX RX Systems as well as through his over 40 years of ham radio.

He is a past president and life member of RARA and served as editor of the RAG from 1981-86. While in Rochester, he was also Technical Director of RRRA and is one of their past presidents as well. He is now Chief Engineer — RF Systems of TX RX Systems,

(Continued on page 4)

RARA Meeting

April 5, 2002
8:00 PM

Henrietta Fire Hall,
3129 E. Henrietta Rd.

The Science And Art Of Troubleshooting

Presented by
Ron Jakubowski, K2RJ

Scholarship Deadline Is April 15th

Richard Goslee, K2VCZ

Time is running out for submitting applications for the Memorial Scholarship. The "Rochester Amateur Radio Association Memorial Scholarship" was established with generous donations made in memory of A. Leland Zwack, W2WPF; William Buchan, W2OMV; and William Resch, K4VOS. The scholarship is available to any licensed Amateur Radio operator who is or will be pursuing any degree of Associate level or higher in any accredited school beyond high school. The individual must be a member of RARA and a resident of New York State. The scholarship is for one individual for one year, but the recipient may reapply for subsequent years. Kellie M. Gauvin, KB2CHC was the winner of the first Memorial Scholarship, which was presented at the Hamfest Banquet last June.

Applications are due no later than April 15th. The RARA Board of Directors and Scholarship Committee will make a final decision by May 15th of each year. The actual award will be presented at the annual RARA Hamfest Banquet held shortly thereafter.

Applications for the scholarship may be obtained at RARA general meetings, by mail at P. O. Box 93333, Rochester, NY 14692-8333 or by calling the RARA hotline at 442-0587. Additional information and a copy of the application is also available on the Rochester Amateur Radio Association web site at <http://www.ggw.org/rara/scholarship.htm>, or from one of the officers.

Additional "tax exempt donations" in memory W2WPF, W2OMV, K4VOS or other silent keys may be sent to: Rochester Amateur Radio Association, Inc., Memorial Scholarship, P.O. Box 93333, Rochester, NY 14692-8333.

One of RARA's standard monthly meetings at this time was to conduct an Old Timer' night. This month brought a recognized and much loved area old timer to lead the event; Mr. Bruce Kelley W2ICE/W8ACY, RARA Club Historian, a popular pre-war DX'er and in 1952, the co-founder of the Antique Wireless Association. Bruce and the AWA became well known for their creation of 35mm color slide presentations covering topics of communications history. This time Bruce brought the program titled "DX Antennas" which focused on DX giants of the time; W2BXA and W6AM and their giant antenna farms. Don Partis WA2AIV (sk), Western District Emergency Coordinator, announced the appointment of Ed Holdsworth, N2EH (sk), to the position of ARES Emergency Coordinator, replacing George Negus K2OIU (sk). Ed Holdsworth additionally held the position of Radio Officer for Monroe County, replacing Jim Collinworth N2JC (sk). Don Partis evidently made a good decision as Holdsworth competently held those position for the next twenty years or so. At the same time frame a busy Don Partis again made news by announcing the formation of the SKYWARN program for the Western New York District. Locally, the SKYWARN facility was at the WX Bureau and when called to duty was manned by Ed Mahar WB2ZJY and Art Bohnke KA2BGW. The SKYWARN facility was equipped by a like new Heath 2 meter FM transceiver expertly refurbished by (who else ?) Dick Goslee K2VCZ (NG2I). While still on the public service theme, Wayne County RACES was heard from as Bruce Blair, WB2QKO, reported on a joint Wayne/Monroe County test of the Ginna Emergency Response plan that went well. Then, two days later the real thing occurred when a Site Area Emergency was declared at the Ginna Nuclear Power Plant. Curiously, the report stops there! We're all here and nobody is glowing so I guess it ended OK. The Harris/RF Amateur Radio Club, WB2PSI, announced to the amateur community a new open UHF repeater on 449.29 Mhz. The techs at Harris proudly announced the use of an all-digital voice system using a super new National Semiconductor Digitalker chip. Just one problem. All of the Harris programmers, together, could not make the chip say "Bristol, New York." RARA Membership Chairman Irv Goodman, AF2K, reported that the then current membership stood at 839, the highest ever, and that number contains 195 new members! With regret we announce the passing of Onnalee Gessin KA2FKW, wife of Len Gessin WA2ZNC. She will be remembered for her planning and organizing of many RARA picnics and for the selection of gifts for our ladies given at the Valentine Dinner-Dance. From the Want Ads you could buy a Swan 350 transceiver for \$200.00 from Norm, K2PPO. A new commercial advertiser is Robinson Rochester Cycles of 900 Main Street with Jim Lill, WA2ZKD, offering expert advice on two wheel traveling.

I rarely use this valuable space for an individual comment or quote, but here goes: Russ Foster KA2NHP wrote "You may forget your first date, your first car, your first big paycheck, but who could ever forget their first QSO? With a trembling fist and a blank mind and a prayer that whoever answers your call, would be slower than you are on CW. I am very near retirement, yet I feel like a young man when I say I am a novice in amateur radio. Thank you RARA for teaching me to become a ham"

The RARA RAG

Published by

The Rochester Amateur Radio Association

INCORPORATED

VOL. 34

APRIL 1982

NO. 8

APRIL 2nd – OLD TIMERS NIGHT at Gleason Works

The April 2nd meeting will be the annual "Old Timers Night" hosted by our club historian, Bruce Kelley, W2ICE. The meeting will be held *THIS MONTH ONLY* at Gleason Works Recreation Center, 1000 University Avenue, one block west of the intersection of Culver Road. There is plenty of parking in front of the building.

Kelley's program will focus on "Super Antennas" and will include a slide show and commentary on antennas used by top DX'ers, W2BXA and W6AM. W2BXA was first in the world to work 100 countries via satellite and W6AM had 60 acres of antennas. The program will also cover the super antennas at the Voice of America's three megawatt station at Cutler, Maine.

The meeting will be called to order promptly at 8 p.m., and refreshments will be served by the GEARS club. The highlight of the evening will be the award of a comfortable desk chair.

Also at this meeting, the nominating committee will present their report and nominations will be opened from the floor for officers and directors. Nominations will also be accepted at the May meeting.

MEMBERSHIP NOTES . . .

by I. J. Goodman, AF2K

At press time, Association membership stood at an all time high of 839, which includes 195 New individuals this season. Your club continues to grow at a steady pace. If you know of a friend who is lax in renewing, why not drop him or her a verbal reminder?

Still plenty of RaRa Directories available. If you have already renewed and still don't have one, or if you have automatically become eligible for one by recently obtaining a call sign and thereby upgrading from "Associate" to "Regular" member status, be sure to obtain your copy at the next meeting. Or you can arrange to have a friend pick one up for you. See the Membership Chairman or assistant.

MAY 1st: EXAM APPLICATION DEADLINE

Hooray, Hooray – the first of May,
Mail the six-ten form before today!

As reported in the March *RaRa Rag*, by John Schooley, the FCC "volunteers" will be in Rochester to give exams at the May 15th Hamfest.

To take an exam at the Hamfest you will have to apply to the Buffalo office of FCC. Send in before May first. Do it now! Be sure to note "Rochester Hamfest" on the outside of your mailing envelope and in Section II-B of the Form 610.

Mail to: Federal Communications Commission, 1307 Federal Building, 111 West Huron Street, Buffalo, New York 14204. If you wish to be sure you got it there on time, enclose a *sase* or postcard back to yourself.

VHF GROUP

The Rochester VHF Group meets Friday, April 23rd. This is not the traditional meeting night, so watch it. The RARRA and VHF Group meeting order are reversed for April only. Program details will be announced by the usual grapevine.

Rochester Group Meets on 15 Meters

Many Rochester natives who have moved out of the area keep in touch with "home" on a net which meets near 21.415 MHz. Monday through Saturday, at 11 a.m. Average net attendance is about 12 stations. Tune in. You may meet an old friend!

SILENT KEY FKW

Onnalee Gessin, KA2PIS, of Pittsford, NY, wife of Len Gessin, WA2ZNC, passed away after a lengthy illness February 28th. She will be remembered for her planning and organization of many RaRa picnics and for the selection of gifts for our ladies that are given at the Valentine Dinner-Dance.

VE TEAM

Testing on Saturday April 16, 2022
At a NEW LOCATION
Returning to RIT
ROCHESTER INSTITUTE OF TECHNOLOGY

Building 16 - **Schmitt Interfaith Center**
 43.08402626755475, -77.6734520379509

Parking: **U-Lot**
 43.08261562973969, -77.6739921659069
 It is off Andrews Memorial Drive

Room: **Skalny Room (SMT-A500)** there is an access door by the dock marked by the blue arrow.

Pre-registration is required visit:

<https://hamstudy.org/sessions/14612/inperson> to find the latest session.

Masks and Distancing ARE Required

More information is available on the RARA website:

https://rochesterham.org/license_testing.htm

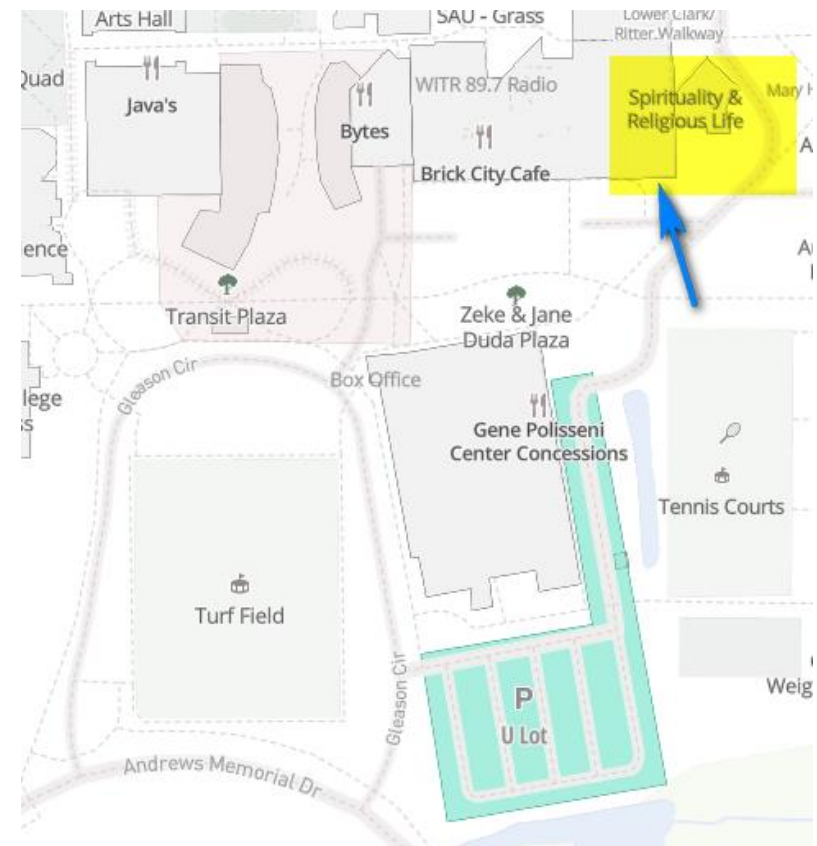
Applicants must supply their own PPE (Mask is a minimum), pen, pencil, calculator and be COVID negative and symptom free

Testing begins at 10:00AM.

Testing is free!

Dwight Alston Sr	KD2YZT	T	Stephen Armstrong	KD2YUJ	G
Bob Berch	KD2NCT	G	Michael Bowen	KC2BTW	G
Calib Chernish	KC3TSG	T	John Cockayne	KD2ZYU	T
Scott Czeck	KC1GHT	G	Christopher Dawson	KD2YZV	T
Gail Galloway	KC3TSH	G	Aaron Howard	KC3TSI	T
John Humnicky	KD2YZW	T	Robert Kennell	KD2YUK	G
Henry Kingston	KD2YZX	T	David Manley	K2SBP	G
Gale McAndrew	KD2YIS	G	Kevin Passmore	KD2TXQ	E
Mike Vasile	KD2YZY	T	Adam Wolf	KC3TSJ	T

New licensees' names are in BOLD



RaRa CALENDAR

TIM BARRETT, K9VB, MEMBERSHIP SECRETARY

April 2022

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1 K1USN Slow Speed Test	2 MS, MO, LA QSO Parties PODXS 070 Club PSK31 Ctest Florida State Parks on the Air SP DX Contest EA RTTY Contest RSGB FT4 Activity Day
3 MS, MO, LA QSO Parties PODXS 070 Club PSK31 Ctest Florida State Parks on the Air SP DX Contest EA RTTY Contest K1USN Slow Speed Test	4 AWA Net 145.110 MHz, 7pm VHF Group 9pm 144.260 SS RSGB 80M Club Champ, CW OK1WC Memorial WW Sideband Activity Contest ARS Spartan Sprint	5 RTTYOPS Weeksprint Phone Weekly Test	6 RaRa Monthly Mtg BSA & ONLINE 7pm ROC City Net ~3.840 MHz, 7 pm A1 Club AWT CW Ops Test VHF/UHF FT8 Activity Contest UK/EICC 80m Coontest Walk for the Bacon Contest	7 RaRa BoD 6:30pm ONLINE ARES Net 146.610 MHz, 7pm VHF Group 9pm 50.200 USB CWOps Test NRAU 10m Activity Contest RTTYOPS Weeksprint NCCC Sprints EACW Meeting	8 K1USN Slow Speed Test	9 QRP ARCI Spring QSO Party DIG QSO Party, CW IG-RY Worldwide RTTY Contest FTn DX Contest SKCC Sprintathon NE NM ND GA QSO Parties Yuri Gagarin DX Contest Texas State Parks on the air
10 ARRL Rookie Roundup, SSB QRP ARCI Spring QSO Party DIG QSO Party, CW IG-RY Worldwide RTTY Contest FTn DX Contest SKCC Sprintathon NE NM ND GA QSO Parties Yuri Gagarin DX Contest Texas State Parks on the air	11 AWA Net 145.110 MHz, 7pm VHF Group 9pm 144.260 SS RSGB FT4 Contest OK1WC Memorial WW Sideband Activity Contest 144 MHz Spring Sprint	12 RTTYOPS Weeksprint Phone Weekly Test	13 ROC City Net ~3.840 MHz, 7 pm A1 Club AWT CW Ops Test VHF/UHF FT8 Activity Contest	14 ARES Net 146.610 MHz, 7pm VHF Group 9pm 50.200 USB CWOps Test RTTYOPS Weeksprint NCCC Sprints EACW Meeting	15 K1USN Slow Speed Test	16 Holyland DX Contest ES Open HF Championship Worked All China Contest YU DX Contest CQMM DX Contest MI ON QSO Parties EA-QRP CW Contest Feld Hell Sprint
17 Holyland DX Contest Worked All China Contest YU DX Contest CQMM DX Contest MI ON QE QSO Parties EA-QRP CW Contest Dutch PACC Digi Contest	18 AWA Net 145.110 MHz, 7pm VHF Group 9pm 144.260 SS World Amateur Radio Day OK1WC Memorial WW Sideband Activity Contest	19 RTTYOPS Weeksprint Phone Weekly Test 222 MHz Spring Sprint	20 ROC City Net ~3.840 MHz, 7 pm A1 Club AWT CW Ops Test VHF/UHF FT8 Activity Contest RSGB 80m Club Champ, SSB Walk for the Bacon Contest	21 ARES Net 146.610 MHz, 7pm VHF Group 9pm 50.200 USB CWOps Test RTTYOPS Weeksprint NCCC Sprints EACW Meeting Walk for the Bacon Contest	22 K1USN Slow Speed Test	23 10-10 Spring Contest SP DXC RTTY Contest Helvetia Contest NO SSB Sprint Contest QRP to the Field
24 10-10 Spring Contest SP DXC RTTY Contest Helvetia Contest NAO SSB Sprint Contest QRP to the Field ANZAC Day Contest BARTG Sprint 75 UA1DZ Memorial Cup	25 AWA Net 145.110 MHz, 7pm VHF Group 9pm 144.260 SS OK1WC Memorial WW Sideband Activity Contest QCX Challenge	26 RTTYOPS Weeksprint Phone Weekly Test SKCC Sprint	27 ROC City Net ~3.840 MHz, 7 pm A1 Club AWT CW Ops Test 432 MHz Spring Sprint	28 ARES Net 146.610 MHz, 7pm VHF Group 9pm 50.200 USB CWOps Test RTTYOPS Weeksprint NCCC Sprints EACW Meeting RSGB 80m Club Champ, Data	29 K1USN Slow Speed Test	30 Drumlins Hamfest, Palmyra SBMS UK/EI DX Contest CW Russian WW Multimode Contest FL QSO Party

NEWS FROM AREA CLUBS

MONROE COUNTY ARES / RACES News

Monroe County Amateur Radio Emergency Service (ARES)® is an amateur radio public service organization based in Monroe County, New York, and is open to all licensed amateur radio operators. Monroe County Radio Amateur Civil Emergency Service (RACES) is a program of the Monroe County Office of Emergency Management. We participate in training and emergency exercises so that we can serve other agencies during times of communication failure.



The Monroe County Amateur Radio Emergency Service, Inc. holds its meetings on the fourth Thursday of each month except in July, August, November and December. Anyone interested, members and non-members, are welcome to attend.

Until further notice, our meetings are via Zoom. Please check our website for any schedule changes. Prospective members can request an invitation by email to: secretary@monroecountymcomm.org.

Monroe County ARES/RACES meets on the air every Thursday of the month at 7:00 PM, on the N2MPE 146.61 MHz (-) 110.9 Hz PL and 444.45 MHz (+) 110.9 Hz PL repeaters. Our club callsign is WB2EOC.

There is no net on nights when we hold our regular meeting, generally on the 4th Thursday of the month.

WEB: www.monroecountymcomm.org

Facebook: Monroe County Amateur Radio Emergency Service, Inc.

Twitter @MCARESNY

Severe Weather Alerts: Winter may bring severe weather in the form of heavy snow storms, strong winds, and flooding. If you experience severe weather, especially when accompanied by damage to property in your area, listen to your local ARES/RACES repeaters for information. While official ARES/RACES activation could be a possibility, it is more important that we open a spontaneous net simply to share information about weather conditions in your immediate area. Don't wait for someone else to do it. Pick up the microphone and start a net. Have each check-in station give you a situational awareness report and emergency power report. If you don't have a copy of the directed net protocol, you can find one at the WEB address listed above. (Activities/ARES Net/ Net Script/ Downloads). We encourage all amateur radio operators to take a free Skywarn TM class offered by the National Weather Service. The schedule of classes can be found at <https://www.weather.gov/buf/skywarn>

Monroe County ARES
George Adams IV, Net Control - cq@k4gwa.net

ROCHESTER DX ASSOCIATION, RDXA

Please check our website for up to date information regarding meeting locations and requirements, if any.

All are welcome.

Check our web site: www.rdxa.com.



ROCHESTER RADIO REPEATER ASSOCIATION

The Rochester Radio Repeater Association, RRRA will be having its regular meeting on April 15th at the Pittsford Town Hall's meeting room. Masks are encouraged. Our new bylaws allow us to use any and all electronic means to communicate with our membership. Future meetings will be held on Zoom and in person or just zoom if our regular meeting place is not available.

Stay tuned to our web site, www.k2rra.org for current information on any changes to our meeting place or meeting presentation subject. Until RRRA elections are held officers for 2022 are, Bob Shewell, N2HJD, President, Bob ODell, N2BZX, Vice President, and Bob Smith, NS2B-Treasurer / Membership Chairman. We are currently looking for a new club Secretary. If interested you can reach out to any of our club officers or just come to our meeting. RRRA also accepts donations to the club. If you are not currently a member and want to support RRRA, you can join at our monthly meeting or on our web site using PayPal. www.k2rra.org

XRX AMATEUR RADIO CLUB

The XRX Amateur Radio Club is not having in-person meetings at this time. We are having online meetings usually on the second Thursday of the months Sept-June. Get the latest updates at <http://xarc.us>

ROCHESTER VHF GROUP

You are invited to join us on-line & on-the-air! We're here to help you to use the license that you worked so hard to get.



Check out what we do by visiting our website at <http://RVHFG.org> to start.

Join our e-mail group by sending a message to RVHFG+subscribe@groups.io.

**Join our weekly on-the-air nets on SSB:
2 meter band - Monday 9 PM 144.260 USB
6 meter band - Thursday 9 PM 50.200 USB**

**No VHF SSB radio (yet) to join the nets?
Log-in to Echolink [ka2ene-L #23426](#)**

We can help to answer the question, "What radio should I buy?" Here's a list of HF+++ radios, those with the HF bands and at least three VHF bands, giving you access to all sorts of VHF fun. Research each one to see which serves you best. Ask questions on our email list. We're here to help!

Yaesu FT-100D	Yaesu FT-817	Yaesu FT-818
Yaesu FT-847	Yaesu FT-857	Yaesu FT-897
Icom IC-706MKIIG	Icom IC-7000	Icom IC-7100
Icom IC-9100	Kenwood TS-2000	

Some are older models and some are newer models, but all provide access to the 6 meter, 2 meter, and 70 centimeter bands using both traditional FM and the exciting narrow-band SSB mode that supports unexpectedly long-distance (100's of km's routinely and 1,000's of km occasionally) VHF communication. These are good all-around radios no matter what club you end up affiliating with later. We hope its us.

AMATEUR RADIO ASSOCIATION OF THE SOUTHERN TIER, ARAST

Currently, ARAST meets the third Thursday of every month at the Emergency Communications Center on Harris Hill in Big Flats, next to the National Soaring Museum. Our Chemung County ARES (CCARES) organization meets the first Tuesday of the month except February at the same location. Both organizations serve amateurs in Chemung, Steuben and Schuyler counties in New York and Bradford and Tioga counties in Pennsylvania. All are welcome to attend our meetings.

NOTE: Both CCARES and ARAST monthly meetings are now being held both in person and online. Check out the Upcoming Events at our website, www.arast.info, for the latest details.

Don't forget to check out our repeaters when you visit the area. N3AQ 147.36(+) and the W2ZJ 146.70(-) are the principal 2-meter repeaters. The latter can also be accessed via Echolink node 574415 with the call sign KD2QND-R. A full list of repeaters that can be heard in the Twin Tiers area surrounding Chemung County can be found at http://www.arast.info/arast_website/public/repeaters.php.

We also invite you to check out our new 6 meter net on Wednesday evenings at 9 p.m. local time on 50.200 MHz USB. The net usually lasts approximately one hour. Operators are encouraged to check in and participate in the round table discussions or simply stop by from time to time. Topics are wide-reaching and are not confined to 6 meters--although discussions tend to center around 6-meter equipment, antennas, propagation, latest band openings and grid squares worked, as well as AM, FM and FT-8 use of the 6-meter band. We would welcome more participation from the western part of our area.

COMMUNITY AMATEUR RADIO CLUB, CARC

If you are interested in being a part of this forward thinking and active club, visit us at a meeting or join us on one of our weekly nets. We meet at the Hoag Library (134 S. Main St. Albion, NY) on the first Saturday of each month at 7PM. Each meeting has a brief training/refresher period with upcoming topics including: net protocol, repeater set-up/maintenance, and digital signaling. The club holds a net every Sunday evening at 8pm (winter) and 9PM (summer) - 0100 UTC Monday - on 147.585 simplex, and we host the Thursday Night Social Net, Thursday at 8:30PM on 147.285+. We'd love to hear you check-in!

DIGITAL COMMUNICATIONS ASSOCIATION OF PERINTON, DCAP

DCAP members continue to experiment with leading edge digital communication modes. We were formed in 1994 to foster the development of local and regional packet radio networks using AX25 and TCP/IP. Today we have members using the club sponsored DSTAR repeater (KB2VZS on 444.8MHz), several personal and publicly accessible DSTAR hotspots, Yaesu System Fusion systems on non-club repeaters and DMR systems through repeaters and personal hotspots. DCAP members meet for breakfast at 7AM nearly every Saturday morning at Rikki's Family Restaurant in the village of Fairport and everyone is welcome to join us. Talk in is on the KB2VZS analog repeater on 146.715MHz with a PL tone of 110.9Hz.

DRUMLINS AMATEUR RADIO CLUB

The Drumlins Amateur Radio Club meets every third Wednesday of the month at 7:30 PM at the Wayne County EMO/Sheriff's Office 7376 State Hwy 31 #1000, Lyons, NY 14489. Doors open at 7 pm, meeting starts at 7:30 pm. Announcements will be made on the 146.685 repeater. The Drumlins ARC website address is <http://drumlinsarc.us/>

KEUKA LAKE AMATEUR RADIO ASSOCIATION, KLARA

Hello from Keuka Lake Amateur Radio Association. We have had a cold snowy winter this year and been very busy with Ares snow reports during the storms. Winter Field Days was held at the Campbell Rest area on Route 86. Our banner was hung up so all could see who we are. At one point a young person saw the antenna in the yard and asked his dad what it was. They walked over and our operator was happy to share their knowledge. It is always a wonderful thing when you can share Amateur Radio with others especially young people. They are our future. Some of our members stayed home but fun was had by all. Since it was bitter cold lots of hot coffee and cocoa was on the menu.

We are working on a Hamfest scheduled for April 30th at the Almond Community Center. Free admittance and small fee to set up a table. Pancakes, sausage, doughnuts, and coffee are on the menu for donation. Contact W2RMT Rick Torrey for more information or email KLARA and I will make sure he gets the email. VE testing will be offered that afternoon.

Join in on our Monday through Friday morning HF net. 8:30 is check in time with net starting at 8:45 on 3.896. It generally lasts about an hour starting with introductions in a round robin format then onto what ever topic anyone wants to discuss.

Sunday mornings we also have the same net check in at 8:30 net starts 8:45.

Sunday evening at 8pm is our 2 meter net on the KLARA repeater system and Echolink. Check in and join us for trivia.

ORLEANS COUNTY AMATEUR RADIO CLUB

The Orleans County ARC meets every 2nd Monday of the month at the Orleans County Emergency Operations Center, 14064 West County House Road, Albion, NY 14411. Doors open at 6:00PM, meeting starts at 7:30PM. Anyone with an interest in amateur radio is welcome. Program topics vary from month to month.

The club has an open two meter net every Tuesday night at 9:00PM local time on the club repeater, WA2DQL/R (145.27 -600KHz offset, 141.3 tone). Everyone is welcome to check in.

See the club website <http://ocarc.us> or contact club Secretary Ron Craig, N5BNO for more information.

THE AMATEUR'S CODE

Originally written by Paul M. Segal, W9EEA (1928)

THE RADIO AMATEUR IS:

CONSIDERATE	Never knowingly operating in such a way as to lessen the pleasure of others.
LOYAL	Offering loyalty, encouragement and support to other amateurs, local club, and the American Radio Relay League, through which Amateur Radio in the United States is represented nationally and internationally.
PROGRESSIVE	With knowledge abreast of science, a well built and efficient station and operation beyond reproach.
FRIENDLY	With slow and patient operation when requested, friendly advice and counsel to the beginner, kindly assistance, co-operation and consideration for the interests of others. These are the hallmarks of the amateur spirit.
BALANCED	Radio is an avocation, never interfering with duties owed to family, job, school or community.
PATRIOTIC	With station and skill always ready for service to country and community.

SKENOH ISLAND AMATEUR RADIO CLUB, SIARC

The Skenoh Island Amateur Radio Club meets every second Wednesday of the month at 7:30PM at the Ontario County Safety Training Facility, 2914 County Road 48, Town of Hopewell. We have License Exam Testing every other month which begins at 6:30PM. The next meeting will be Wednesday, April 13th. There will NOT be license exam testing.

Check the SIARC website for updates. <http://www.siarc.us/>

SIARC is also holding a Health and Welfare NET Monday through Friday each week at 2000 hours on the SIARC 146.820 repeater (located in Canandaigua, NY), Tone 110.9. This net is to pass along general information and keep hams in touch. All hams are invited to participate.

GENESEE VALLEY AMATEUR RADIO ASSOCIATION

Email n3dsp@lafireline.net for details.

INTERLOCK ROCHESTER - K2HAX - ROCHESTER'S HACKERSPACE

Visit our website at <http://www.interlockroc.org/>, contact us at info@interlockroc.org, or find us in #interlock on Freenode IRC.

ROCHESTER MAKERSPACE

For more information visit <https://www.makerspacerochester.org/hamradio>

ASTRONOMY SECTION ROCHESTER ACADEMY OF SCIENCE

For more information visit <http://www.rochesterastronomy.org/>

FOR SALE

VHF/UHF ANTENNAS FOR SALE

BRIAN O'CONNOR, KA2CGB

These antennas are looking for a new home. Unless otherwise stated, each is understood to have been "operational when retired".

- 6m-23cm: discone vertical omni, complete with support mast and feedline. Looks like Comet model D130NJ. \$65.
- 2m: 7+7 element crossed yagi, configured for circular polarization with quadrature balun and coaxial relay for RH/LH switching. KLM model 2M-14C. 13 dBiC pattern gain with 20 dB front-to-back ratio. \$100.
- 2m: stacked 5/8-wave colinear vertical omni with ground plane. Hustler model G6-144B "Master Gainer", a preferred antenna for repeaters and base stations. 8 dBi pattern gain. \$60.
- 70cm: pair of 11 element yagis. Cushcraft model A430-11S yagis with stacking boom but without phasing harness. Each yagi has 13 dBi pattern gain with 20 dB front-to-back ratio. \$125 for the lot.
- 70cm: circular polarized crossed loop. M2 model EB432 "Eggbeater" with RK-70CM ground plane. 5.5 dBiC pattern gain. \$90.
- 33cm: 7 element yagi. Decibel Products model DB499-K (890-960 MHz). 12 dBi pattern gain with 20 dB front-to-back ratio. Antenna with bracket but without mast clamps. As new. \$75.

All items are on the ground and ready to pick up.

Photos and PDFs available.

Please contact ka2cgb at gmail dot com

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<https://elecraft.com/>



www.tigertronics.com



<https://heilhamradio.com/>

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MAY RAG DEADLINE

APRIL 15, 2022

**RARA MEETS AT 7PM ON THE FIRST
WEDNESDAY OF EACH MONTH.**

JOIN US IN PERSON

OR

ONLINE AT:

<https://attendee.gotowebinar.com/register/2736607897512266252>

CONTACT WEBMASTER@ROCHESTERHAM.ORG FOR SUPPORT

Rochester Area Repeater Listing

THE RARA RAG

Published by

Rochester Amateur Radio Association, Inc.
P.O. Box 93333, Rochester, NY, 14692-8333

Hotline – (585) 210- 8910

Website – <http://www.rochesterham.org>